SUMMARY OF ESTIMATED QUANTITIES

ITEM NO.	ITEM DESCRIPTION	MEASUREMENT		QUANTITY
		METHOD	UNIT	
15101	MOBILIZATION	LSQ	Lump Sum	1
20304(A)	REMOVAL OF EXISTING TIMBER BRIDGE	LSQ	Lump Sum	1
20304(B)	REMOVAL OF EXISTING CONCRETE	LSQ	Lump Sum	1
20404	UNCLASSIFIED BORROW	DQ	Cubic Yard	16
30111	AGGREGATE SURFACE COURSE, 2" DEPTH (GOVERNMENT)	DQ	Cubic Yard	5
55501(A)	STRUCTURAL STEEL, BEAMS, FURNISHED, FABRICATED, AND ERECTED	DQ	Pound	23,000
55501(B)	STRUCTURAL STEEL, BENT, FURNISHED, FABRICATED, AND ERECTED	DQ	Pound	1450
55601	TIMBER BRIDGE HANDRAIL	DQ	Lineal Foot	206.50
55702(A)	TREATED STRUCTURAL TIMBER AND LUMBER, RUNNING PLANK	DQ	MBF	1.25
55702(B)	TREATED STRUCTURAL TIMBER AND LUMBER, PIER LAGGING	DQ	MBF	0.28
55705	TREATED STRUCTURAL TIMBER, GLUED LAMINATED DECK PANELS	DQ	MBF	2.30
60103	CONCRETE	LSQ	Lump Sum	1

DQ = Design Quantity; AQ= Actual Quantity

BRIDGE DESIGN NOTES:

DESIGN: This structure has been designed in accordance with the 17th edition AASHTO Standard Specifications for Highway bridges and AASHTO Guide Specifications for Design of Pedestrian Bridges.

DESIGN LOADS: This structure has been designed for the following loads:

Snow Load = 225 psf (1.15% allowable stress)
Live Load = 65 psf
Stock Use = 1000 lb. concentrated load

GENERAL NOTES:

SPECIFICATIONS: Construct the project in compliance with STANDARD SPECIFICATIONS FOR CONSTRUCTION OF ROADS AND BRIDGES ON FEDERAL HIGHWAY PROJECTS, FP-03, U.S. Customary Units, and applicable special provisions.

EROSION CONTROL PLAN: Submit a soil erosion plan to the CO for review prior to beginning any work. Provide methods to prevent runoff from the construction site from entering directly into the stream.

GLUED LAMINATES: Furnish Deck Panels of glued laminated members of Coast Region Douglas Fir conforming to American Institute of Timber Construction (AITC) 117, Use members manufactured for wet condition use and industrial appearance grade. Furnish panels that consist of glued laminated Axial Combinations Identification No. 2, 3, 4 or 5.

BRIDGE RAIL LUMBER: Use treated S4S members unless noted otherwise. Use members of Hem-Fir/Douglas Fir No. 1 Grade or Better conforming to current WWPA Grading Rules for Western Lumber or Current WCLIB Standard Grading Rules for Western Coast Lumber.

RUNNING PLANK & PIER LAGGING: Use treated running plank of rough sawn Western Larch or Coastal Region Douglas Fir No. 2 Grade or Better conforming to current WWPA Grading Rules for Western Lumber or current WCLIB Standard Grading Rules for West Coast Lumber.

FABRICATION: Submit Shop drawings for all timber. Show all dimensions and fabrication details for all cut or bored timbers. Mark all pieces with the Piece Mark shown on the DRAWINGS, such as B1, S1, etc.. Do not field drill holes unless shown on the DRAWINGS.

TREATMENT: After fabrication incise and pressure treat all lumber in accordance with AWPA C-28, above ground use, for glued laminates and AWPA C-2, soil and fresh water use for solid sawn members using pentachlorophenal meeting AWPA P-8 using AWPA P-9 Type A solvent. Penetration requirements are specified in AWPA.

INSPECTION and CERTIFICATION: Furnish the following compliance certificates upon delivery:
A) Supplier certification, from a WWPA or WCLIB approved supplier, that all wood materials meet the requirements as to species and grade.
B) Certification of perservative, penetration in inches, and retention in pounds per cubic foot (assay method) by either a qualified testing and inspection agency or supplier certification. Supplier certification requires each solid piece to be stamped or branded with the ALSC quality mark.
C) Certification from a qualified inspection and testing agency indicating conformance of all glue laminated members with AITC 117-93.
D) Supplier certification that all treated wood materials were treated in conformance with and meet the requirements of WWPI's Best Management Practices for the Use of Treated Wood in Aquatic Enviornments.

CONCRETE: Use concrete with a minimum 28 day compressive strength of 3000 psi and an entrained air content of 5% ± 1%.

Chamfer all exposed edges of concrete and fillet all re-entrant angles 3/4" unless otherwise noted.

REINFORCING STEEL: Use non-prestressed reinforcing of the deformed type conforming to AASHTO M31 (ASTM A615), Grade 60. Concrete cover shall be as shown; where not shown it shall conform to AASHTO. Cut and bend steel in accordance with ACI 315.

HARDWARE AND STRUCTURAL STEEL: Furnish shapes, plates and bars meeting the requirements of AASHTO M270, Grade 50W, unless otherwise specified in these plans. Use nuts and bolts meeting the requirements of ASTM A325, Type 3 except as noted. Use malleable iron washers against wood, except where otherwise noted.

Weld in accordance with the Bridge Welding Code, AWS D1.5.

Prepare and submit drawings for steel structures per Subsection 555.06 of the Standard Specifications.

FIELD TREATMENT: Furnish Copper naphthenate (2% solution) for field treating of wood. Carefully trim and give three brush coats of the field treatment solution to all abrasions and cuts made in the field. Pour perservative in all holes drilled in the field. Pour perservative in unused holes and plugged with tight fitting, treated, hardwood dowels.

DISPOSAL: All materials designated for removal become the property of the Contractor and are to be removed from Forest System Lands.

BY	DATE	REVISION DESCRIPTION

DESIGN CT PROJ. NO. 5282
DRAWN CT DATE MAR., 2008
CHECKED MJ SURVEYED DJ&A

DJ&A, P.C. CONSULTING ENGINEERS & LAND SURVEYORS

USFS - CLEARWATER N.F.
COLT CREEK CABIN TRAIL
BRIDGE REPLACEMENT

ESTIMATED QUANTITIES
AND GENERAL NOTES

SHEET 2 OF 14